Comparison table

Uncooled detectors without optical immersion

Model	λ_{op}, µm	Type	D*, cmHz$^{1/2}$/W	τ, ns
PV-3	3	PV	6.5×10^{9}	15
PV-3.4	3.4	PV	5×10^{9}	15
PC-4	4	PC	2×10^{9}	1000
PV-4	4	PV	3×10^{9}	15
PC-5	5	PC	1×10^{9}	500
PV-5	5	PV	1×10^{9}	15
PC-6	6	PC	3×10^{8}	200
PV-6	6	PV	5×10^{8}	12
PV-8	8	PV	4×10^{7}	7
PVM-8	8	PV	6×10^{7}	12
PC-9	9	PC	2×10^{7}	2
PC-10.6 (R005)	10,6	PC	9×10^{6}	1
PVM-10.6	10,6	PV	1×10^{7}	1
PEM-10.6	10,6	PEM	1×10^{7}	1
PCQ-10.6	10,6	PC	9×10^{6}	1

Uncooled optically immersed detectors

Model	λ_{op}, µm	Type	D*, cmHz$^{1/2}$/W	τ, ns
PVI-3	3	PV	5×10^{10}	15
PVI-3.4	3.4	PV	4.5×10^{10}	15
PCI-4	4	PC	6×10^{9}	1000
PVI-4	4	PV	2×10^{10}	15
PCI-5	5	PC	4×10^{9}	500
PVI-5	5	PV	5×10^{9}	15
PCI-6	6	PC	1×10^{9}	200
PVI-6	6	PV	4×10^{9}	12
PVI-8	8	PV	4×10^{8}	7
PVMI-8	8	PV	3×10^{8}	7
PCI-9	9	PC	1×10^{8}	2
PCI-10.6	10,6	PC	9×10^{7}	1
PVMI-10.6	10,6	PV	1×10^{8}	1
PEMI-10.6	10,6	PEM	5×10^{7}	1

2TE cooled optically immersed detectors

Model	λ_{op}, µm	Type	D*, cmHz1$^{/2}$/W	τ, ns
PVI-2TE-3	3	PV	5.5×10^{11}	15
PVI-2TE-3.4	3.4	PV	3×10^{11}	15
PCI-2TE-4	4	PC	4×10^{10}	4000
PVI-2TE-4	4	PV	2×10^{11}	20
PCI-2TE-5	5	PC	2×10^{10}	2000
PVI-2TE-5	5	PV	6×10^{10}	20
PCI-2TE-6	6	PC	1×10^{10}	1000
PVI-2TE-6	6	PV	2×10^{10}	10
PVI-2TE-8	8	PV	2×10^{9}	7
PVMI-2TE-8	8	PV	2×10^{9}	3
PCI-2TE-9	9	PC	4×10^{9}	20
PCI-2TE-10.6	10,6	PC	1.4×10^{9}	10
PVI-2TE-10.6	10,6	PV	1×10^{9}	3
PVMI-2TE-10.6	10,6	PV	1×10^{9}	3
PCI-2TE-12	12	PC	4.5×10^{8}	2
PCI-2TE-13	13	PC	6×10^{8}	2

2TE cooled detector without optical immersion

Model	λ_{op}, µm	Type	D*, cmHz$^{1/2}$/W	τ, ns
PV-2TE-3	3	PV	7×10^{10}	15
PV-2TE-3.4	3.4	PV	4×10^{10}	15
PC-2TE-4	4	PC	2×10^{10}	4000
PV-2TE-4	4	PV	3×10^{10}	20
PC-2TE-5	5	PC	1×10^{10}	2000
PV-2TE-5	5	PV	9×10^{9}	20
PC-2TE-6	6	PC	3×10^{9}	1000
PV-2TE-6	6	PV	2×10^{9}	10
PV-2TE-8	8	PV	2×10^{8}	7
PVM-2TE-8	8	PV	3×10^{8}	7
PC-2TE-9	9	PC	8×10^{8}	20
PC-2TE-10.6	10,6	PC	1.4×10^{8}	10
PV-2TE-10.6	10,6	PV	1×10^{8}	3
PVM-2TE-10.6	10,6	PV	1×10^{8}	3
PC-2TE-12	12	PC	4.5×10^{7}	2
PC-2TE-13	13	PC	9×10^{6}	2

3TE cooled optically immersed detectors

Model	λ_{op}, µm	Type	D*, $cmHz^{1/2}/W$	τ, ns
PVI-3TE-3	3	PV	7×10^{11}	15
PVI-3TE-3.4	3.4	PV	5×10^{11}	15
PVI-3TE-4	4	PV	4×10^{11}	20
PVI-3TE-5	5	PV	8×10^{10}	20
PVI-3TE-6	6	PV	3×10^{10}	10
PVI-3TE-8	8	PV	3×10^{9}	7
PVMI-3TE-8	8	PV	3×10^{9}	7
PCI-3TE-10.6	10,6	PC	2.5×10^{9}	20
PVI-3TE-10.6	10,6	PV	1.5×10^{9}	3
PVMI-3TE-10.6	10.6	PV	2.5×10^{9}	7
PCI-3TE-12	12	PC	9×10^{8}	15
PCI-3TE-13	13	PC	4.5×10^{8}	10

3TE cooled detectors without optical immersion

Model	λ_{op}, µm	Type	D*, $cmHz^{1/2}/W$	τ, ns
PV-3TE-3	3	PV	1×10^{11}	15
PV-3TE-3.4	3,4	PV	7×10^{10}	15
PV-3TE-4	4	PV	4×10^{10}	20
PV-3TE-5	5	PV	1×10^{10}	20
PV-3TE-6	6	PV	4×10^{9}	10
PV-3TE-8	8	PV	3×10^{8}	7
PV-3TE-10.6	10,6	PV	1.5×10^{8}	3

4TE cooled detectors

Model	λ_{op}, µm	Type	D*, $cmHz^{1/2}/W$	τ, ns
PV-4TE-3	3	PV	1.5×10^{11}	15
PV-4TE-3.4	3,4	PV	1×10^{11}	15
PV-4TE-4	4	PV	6×10^{10}	20
PV-4TE-5	5	PV	1.5×10^{10}	20
PV-4TE-6	6	PV	5×10^{9}	10
PV-4TE-8	8	PV	4×10^{8}	7
PV-4TE-10.6	10.6	PV	2×10^{8}	3
PVI-4TE-3	3	PV	8×10^{11}	15
PVI-4TE-3.4	3,4	PV	7×10^{11}	15
PVI-4TE-4	4	PV	4×10^{11}	20
PVI-4TE-5	5	PV	1×10^{11}	20
PVI-4TE-6	6	PV	4×10^{10}	10
PVI-4TE-8	8	PV	4×10^{9}	7
PVI-4TE-10.6	10.6	PV	2×10^{9}	3

λ_{op}, µm – Optimal wavelength - The wavelength for which a device was optimized for. For near IR detectors λ_{op} is close to peak value. In contrast, for uncooled (300K) long wavelength detectors λ_{op} is larger is than λ_{co}.
Device type:
PC – Photoconductive,
PV- Photovoltaic,
PEM – Photoelectromagnetic
D*, $cmHz^{½}/W$ – minimum detectivity. The higher the D* value, the better the detector.
τ, ns - maximum time constant (“1/e” time)

Time constants have been measured using Alpes Lasers SA quantum cascade lasers (QCL) (www.alpeslasers.ch).